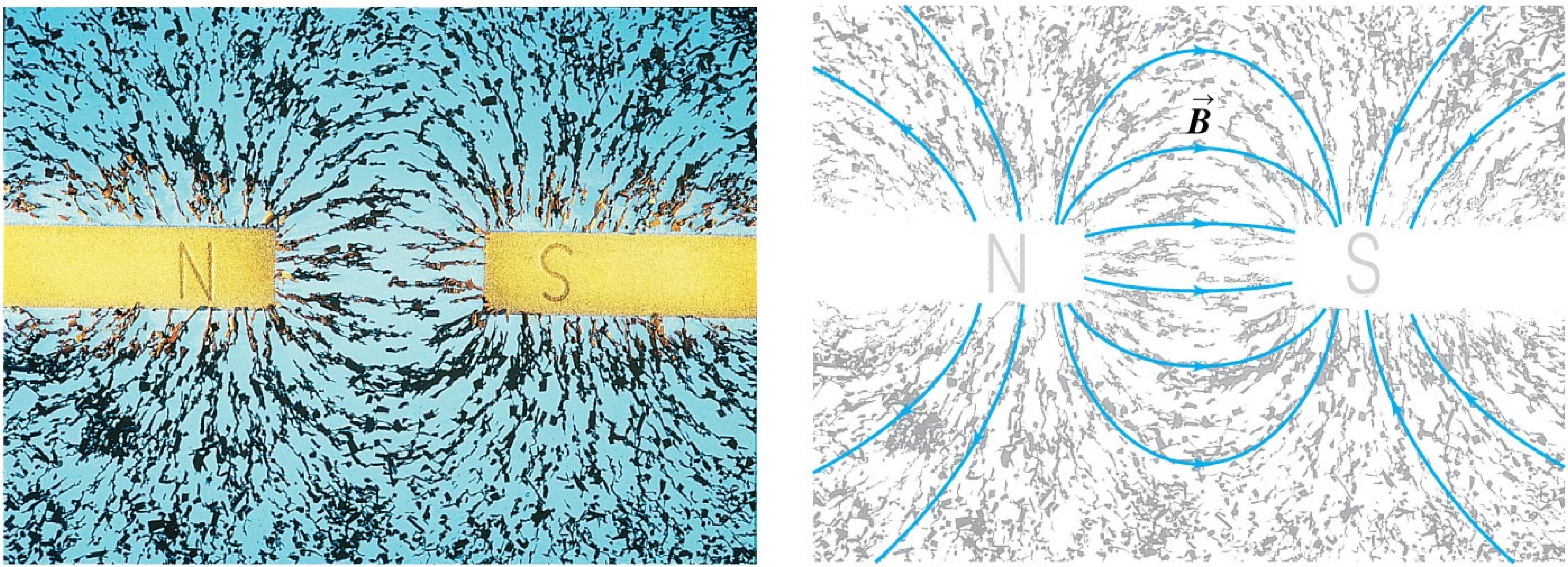
Magnetic Field Lines of a Permanent Magnet

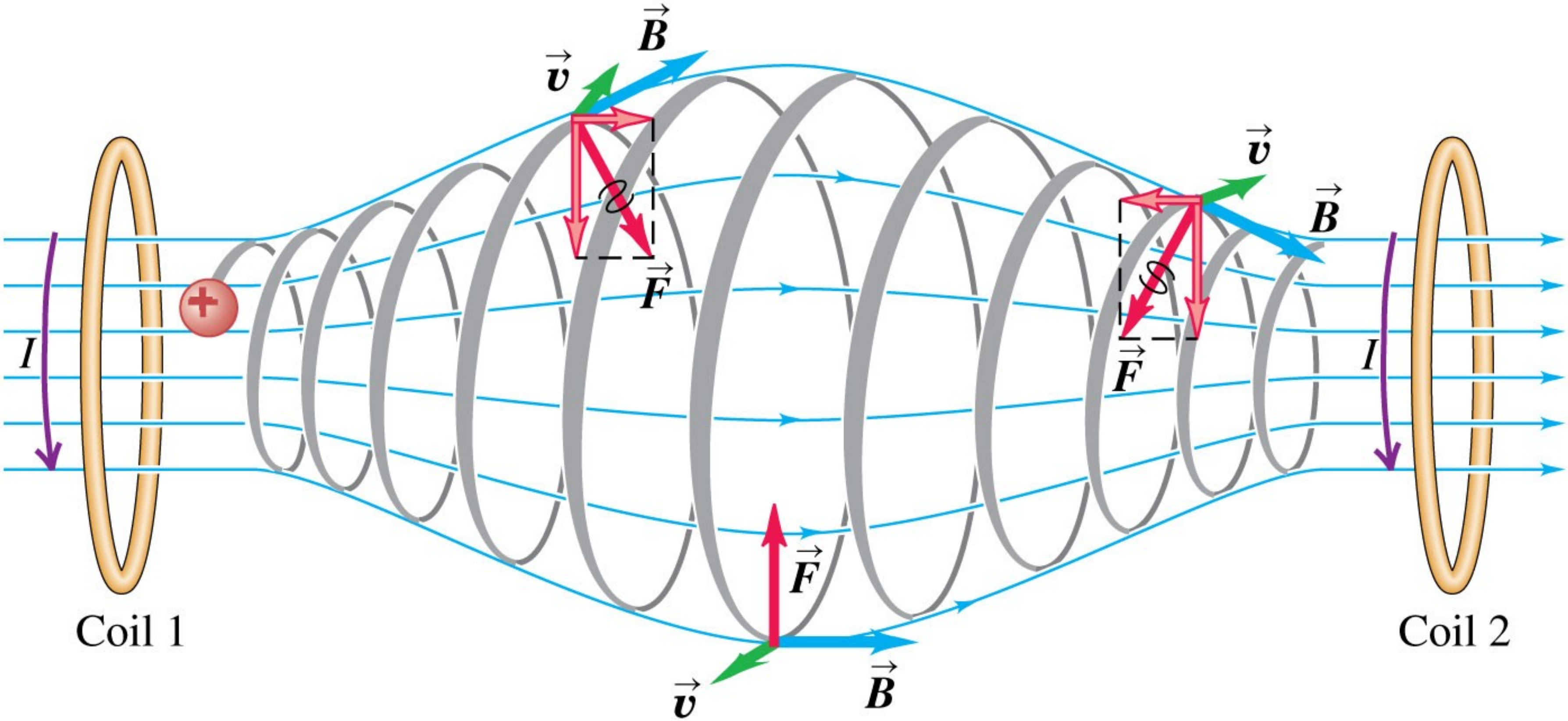
FIG. 1

(a) (b)



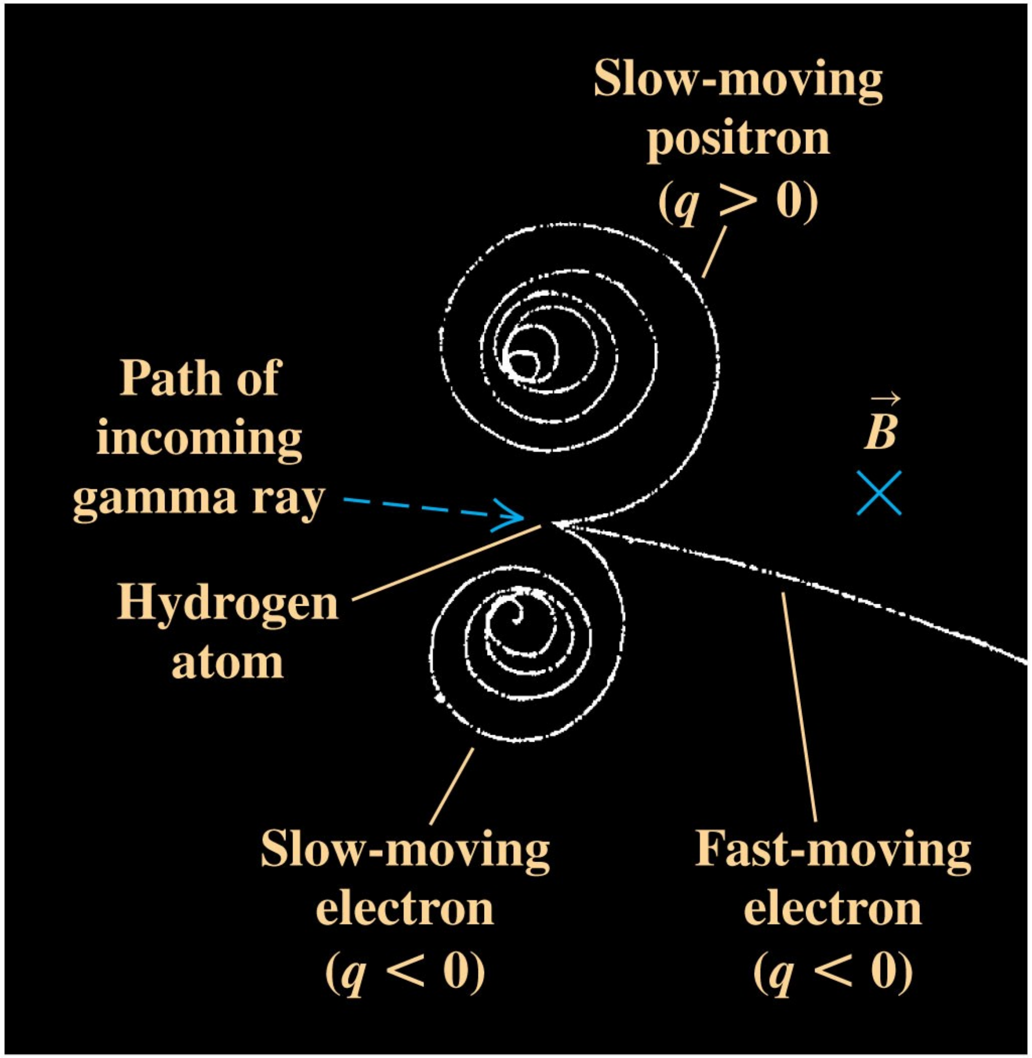
Application: Magnetic Trap

FIG. 2



Application: Bubble Chamber

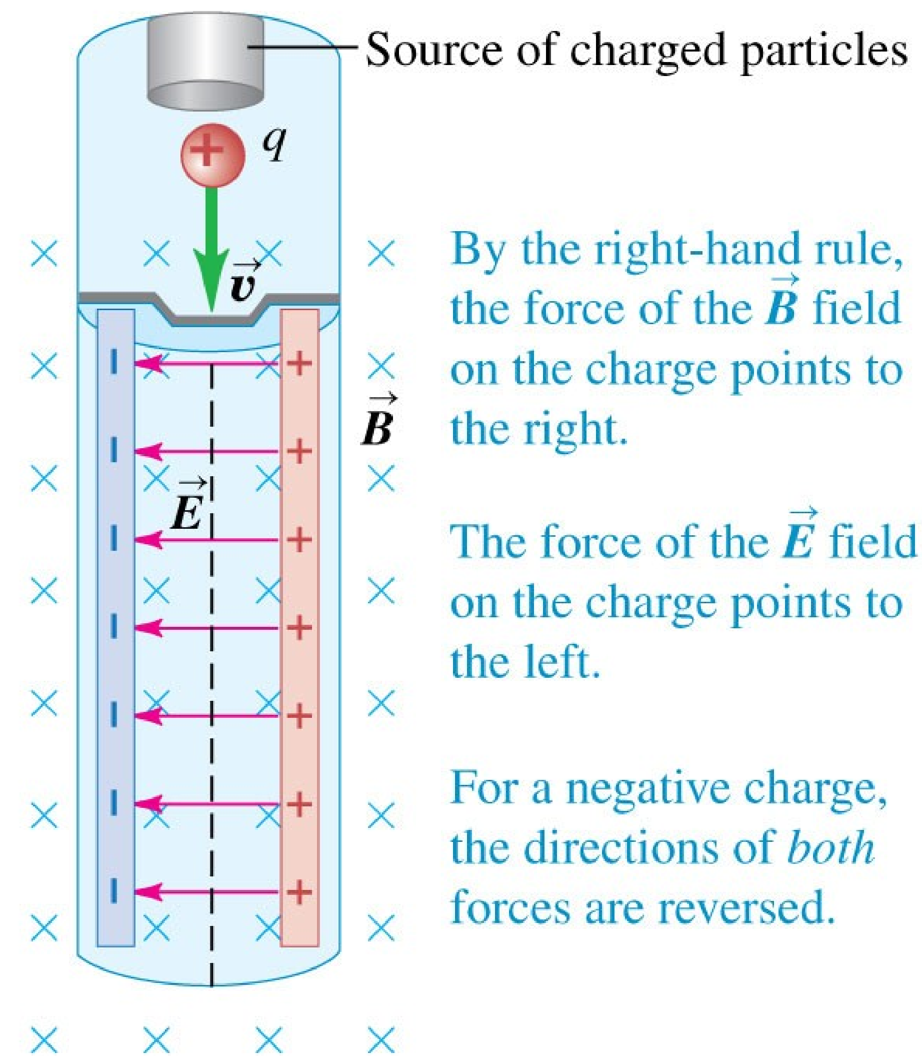
FIG. 3



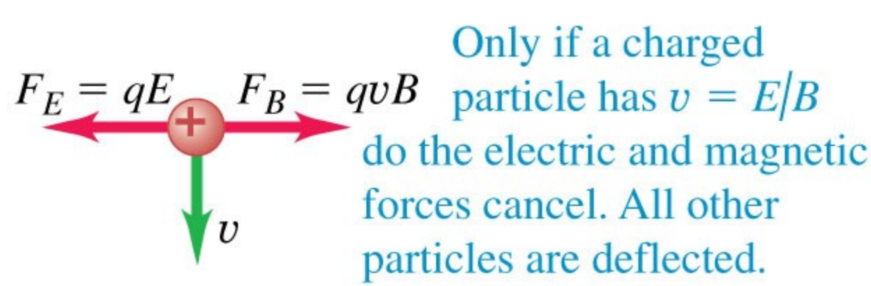
Application: Velocity Selector

FIG. 4

(a) Schematic diagram of velocity selector

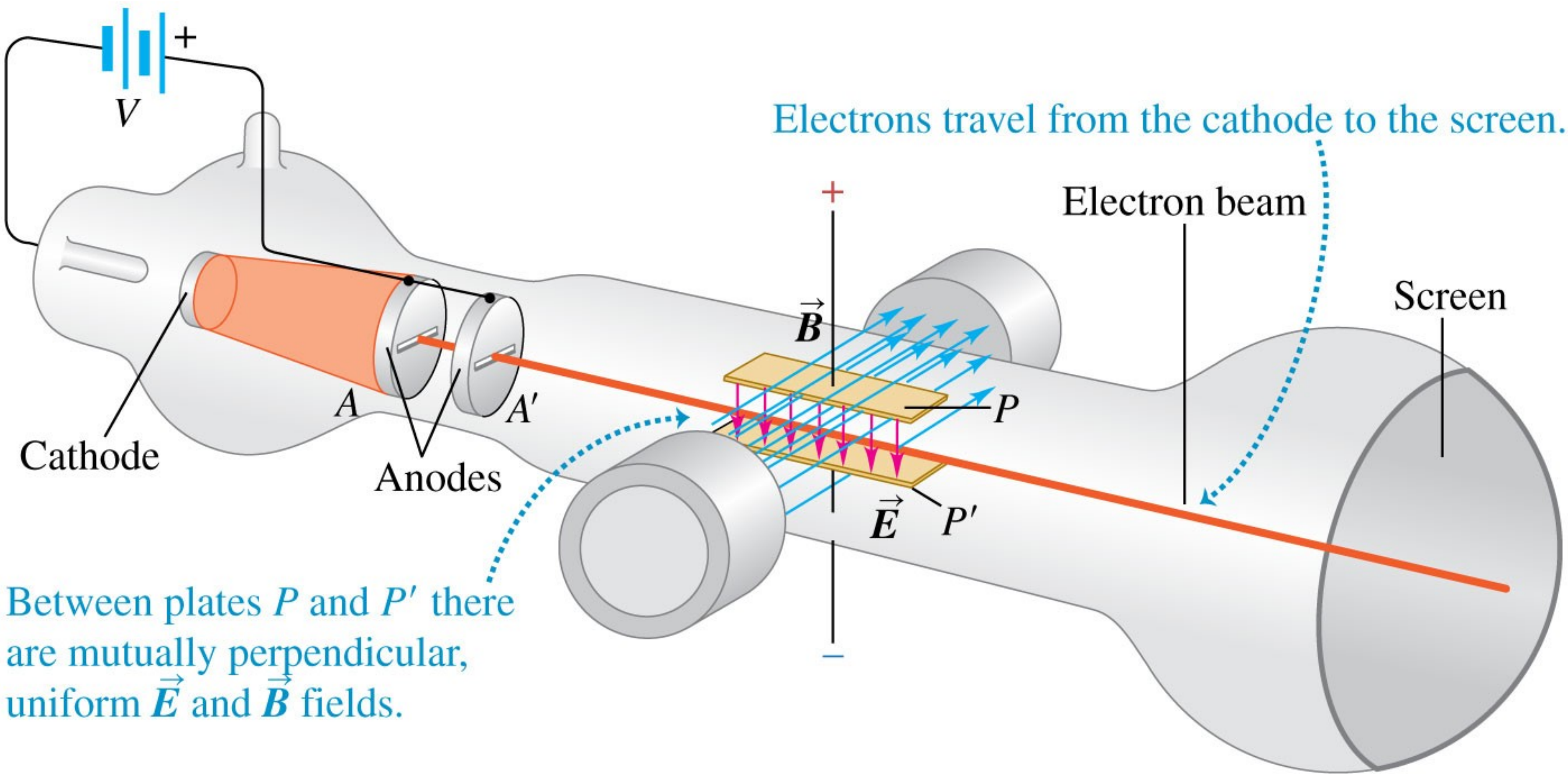


(b) Free-body diagram for a positive particle



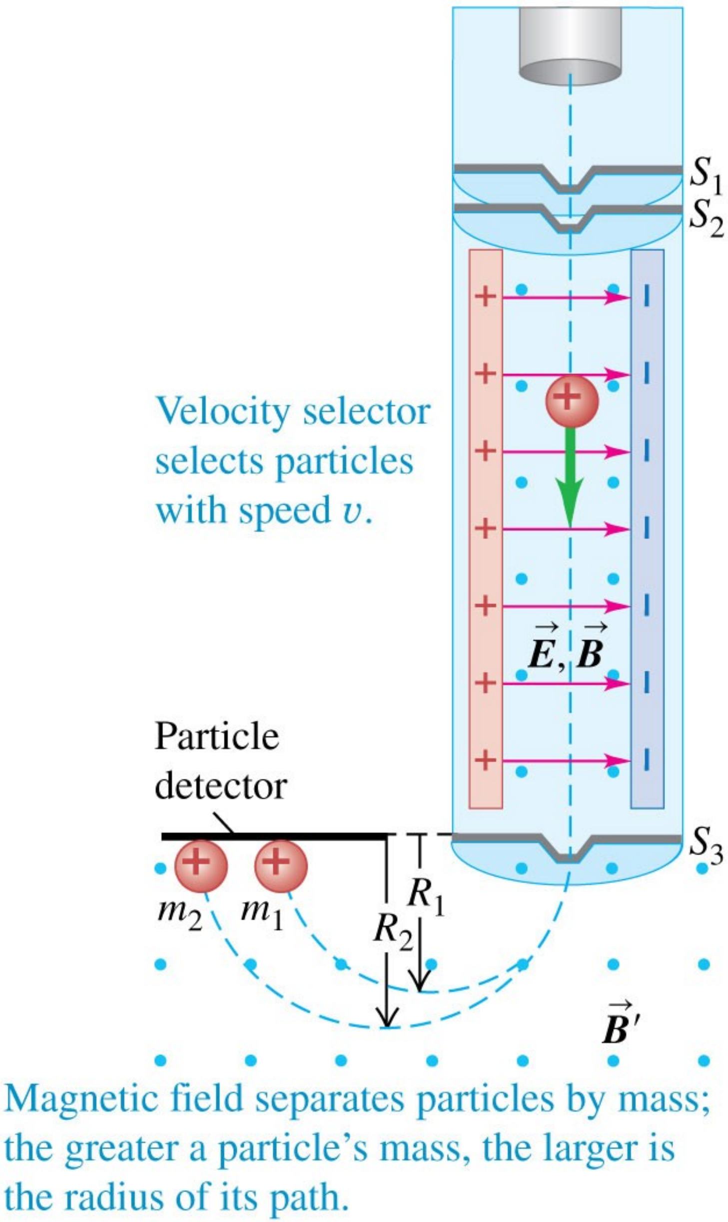
Thomson's Experiment (e/m ratio)

FIG. 5



Application: Mass Spectrometer

FIG. 6



Current Loop
in a Uniform Magnetic Field

FIG. 7